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EXAMINER	
GELAGAY, SHEWAYE	

ART UNIT	PAPER NUMBER
2437	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/006,554	SABET-SHARGHI ET AL.	
	Examiner	Art Unit	
	SHEWAYE GELAGAY	2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4,6,7 and 35-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4, 6-7 and 35-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to applicant's amendment filed on July 23, 2008.

2. Claims 4, 6, 7 have been amended. Claims 1-3, 5 and 8-34 are cancelled. New claims 35-51 have been added. Claims 4, 6-7 and 35-51 are pending.

Election/Restrictions

3. Applicant's arguments filed July 23, 2008 have been fully considered but they are not persuasive. In response to applicant's arguments the following comments are made:

The applicant argued that Hirota recites the use of a single "Filekey" being used for the AOB frames in a given AOB file. The Examiner would like to point out that Hirota teaches an audio track including a plurality of encrypted AOBs encrypted with a plurality of different encryption keys. When an audio stream is for a music album which includes a long track, the long track is divided into a plurality of files to ensure that the number of pieces of entry information for a single file does not exceed a predetermined number. When a playback apparatus reads a file and commences playback of AOBs included in the file, the playback apparatus also reads the management information and stores it in internal memory. When the playback of this AOB ends, the following AOB is read and overwritten into the internal memory of the payback apparatus to take place the management information that was hitherto stored. (col. 3, line 65-col. 5, line 40)

The output of the Frame and overwriting the cluster data are repeatedly performed, so that the Frames included in the File are successively outputted to the descrambler and AAC decoder. (col. 43, lines 40-67) The playback apparatus accesses the authentication region and reads the FileKey that is stored having the same number

as the File. The FileKey is sent to the descrambler, so that by successively outputting Frames included in the File into the descrambler the Frames can be successively played back. (i.e. copying a fractional portion of encrypted audio or video content of the file, the fractional portion comprising less than about 10 seconds of content of the file) (col. 44, lines 10-49) Therefore Hirota teaches that a file is descrambling and decryption each File with different key. Each file comprises minimum playback of two seconds and maximum playback of 8.4 minutes. (i.e. the quantity of content copied and decrypted before copying and decrypting an additional quantity)

Applicant's specification discloses that "Track 300 is composed of AOB 304 and AOB 308, and track 302 is composed of AOB 306 and the last track is composed of AOB ...Audio files are referred to as audio objects (AOB's) ...A portion of the track is played back. This portion may be in any of the files that comprise the track." The Examiner would like to point out again, Hirota teaches an audio track including a plurality of encrypted AOBs encrypted with a plurality of different encryption keys. When an audio stream is for a music album which includes a long track, the long track is divided into a plurality of files to ensure that the number of pieces of entry information for a single file does not exceed a predetermined number. When a playback apparatus reads a file and commences playback of AOBs included in the file, the playback apparatus also reads the management information and stores it in internal memory. When the playback of this AOB ends, the following AOB is read and overwritten into the internal memory of the payback apparatus to take place the management information that was hitherto stored. (col. 3, line 65-col. 5, line 40) Applicant also teaches "Each

track may be made of multiple files, for example, in case of a long classical song. For large video clips, a title may comprise many files." Therefore a track is not decrypted in its entirety instead the track is divided into a plurality of files which are descrambled and decrypted with different keys.

Hirota teaches data can only be read from or written into the authentication region if mutual authentication has been successfully performed by the flash memory card and the device connected to the flash memory card. (col. 10, lines 3-35)The FileKeys are stored in the authentication region. (col. 13, lines 22-28) The playback apparatus that has succeeded in obtaining secure media ID then performs mutual authentication with the authorization unit of the flash memory card. When the mutual authentication succeeded, the payback apparatus generates a command for accessing the authentication region of the flash memory card ..., the authentication region access control unit accesses the sector specified by the valid parameters and reads the encryption key FileKey and encrypts the encryption key FileKey using the secure key obtained during the mutual authentication...the playback apparatus decrypts the encryption key FileKey using the secure key...and decrypt again the encryption FileKey using the master key and the media ID to obtain the encryption key FileKey. Once the encryption key FileKey has been obtained and an AOB corresponding to this encryption key FileKey has been read from the obtained authentication region, the AOB is decrypted using the encryption key FileKey and music is simultaneously played. (col. 58, line 50-col. 60, line 13) Therefore the keys are calculated to decrypt and play only an AOB file not the entire track.

The applicant argued that Hirota does not disclose deleting the decrypted key after decryption the fraction portion of the audio and/or video file before decrypting an additional fractional portion of the file. Hirota discloses when a playback apparatus reads a file and commences playback of the audio objects included in the file, the playback apparatus also reads the management information ...when the playback of this audio object ends, the following audio object is read and the corresponding management information is read and overwritten. (col. 5, lines 22-40) According to The American Heritage College Dictionary "overwriting" is defined as "to destroy or lose old data by recording new data over it." Although Hirota does not explicitly disclose "deleting the decrypted keys" Dolan discloses deleting the decrypted keys and the key encrypting key after use (col. 4, lines 56-57) which adequate to meet the claimed limitation.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's argument failed to explicitly identify specific claim limitations, which would define a patentable distinction over prior arts. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification.

Therefore, the examiner asserts that cited prior arts do teach or suggest the subject matter broadly recited in the claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 4, 6-7 and 35-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota et al. (hereinafter Hirota) U.S. Patent 6,856,431 in view of Dolan et al. (hereinafter Dolan) US 5,604,801.

As per claims 4 and 39:

Hirota teaches a computer readable storage medium having an executable Program, the program to be utilized in an audio and/or video device for playback of encrypted audio and/or video files, the program configured to:

decrypt encrypted audio and/or video content of the file from a memory card based on a command received from a user interface of the device, (col. 42, lines 34-40) wherein decrypting the audio or video content comprises:

copying one or more encrypted keys from a protected area of the memory card into a memory buffer of the device; (col. 59, lines 55-56)

copying a fractional portion of encrypted audio or video content of the file, the fractional portion comprising less than about 10 seconds of content of the file, from the memory card into a memory buffer of the devices; (col. 10, lines 24-25; col. 14, lines 4-67; col. 44, lines 10-49; col.59, lines 65-66, col. 60, lines 5-6; While an Element has a playback period of around two seconds, Block has a maximum playback period of 8.4 minutes)

decrypting one or more of the copied encrypted keys; (col. 10, lines 24-25; col. 58, line 50-col. 60, line 13)

decrypting the fractional portion of copied encrypted audio or video content of the file with the one or more decrypted keys; (col. 42, lines 34-35; col. 60, line 11; col. 58, line 50-col. 60, line 13)

In addition, Hirota further discloses when the playback of audio objects which create audio tracks ends, the following audio object is read and when the playback of the following audio object commences, the corresponding management information is read and overwritten into the internal memory of the playback device to take the place of management information that was hitherto stored. (Col. 5, lines 34-39; Col. 20, lines 52-61)

Hirota does not explicitly disclose immediately deleting the one or more keys after decrypting the audio and/or video content before decrypting. Dolan in analogous art, however, discloses immediately deleting the one or more keys after decrypting the audio and/or video content before decrypting. (Abstract; col. 4, lines 50-58) Therefore, it would have been obvious to a person having ordinary skill in the art at the time the

invention was made to modify the method disclosed by Hirota with Dolan in order to minimize the damage caused by the exposure of one of the encryption keys. (col. 4, 17-19; Hirota)

As per claims 6 and 40:

The combination of Hirota and Dolan teaches all the subject matter as discussed above. In addition, Hirota further discloses wherein the module is configured to retrieve and decrypt about two seconds of content at a time with the one or more decrypted keys before the decrypted key is deleted. (col. 15, lines 45-53)

As per claim 7:

Hirota teaches a computer readable storage medium having an executable program, the program to be utilized in an audio and/or video device for playback of encrypted audio/or video content, the program configured to:

decrypt and encrypted audio or video track from the memory card, wherein decrypting the audio or video track comprises:

(a) decrypting a key stored in the memory of the device; (Col. 10, lines 24-25; col. 58, line 50-col. 60, line 13) and thereafter

(b) decrypting a portion of the audio or video file less than an entirety of the audio or video file; (col. 3, line 65-col. 5, line 40; Col. 42, lines 34-35; col. 58, line 50-col. 60, line 13)

(d) repeating (a) through (c) until the entirety of the audio or video file is decrypted. (col. 20, lines 56-61; Col. 47, lines 25-27; Col. 60, lines 11)

In addition, Hirota further discloses when the playback of audio objects which create audio tracks ends, the following audio object is read and when the playback of the following audio object commences, the corresponding management information is read and overwritten into the internal memory of the playback device to take the place of management information that was hitherto stored. (Col. 5, lines 34-39; Col. 20, lines 52-61)

Hirota does not explicitly disclose (d) deleting the decrypted title key; and (e) deleting the media unique key. Dolan in analogous art, however, discloses the title and disc key may be deleted whenever copying is performed. (Abstract; col. 4, lines 50-58) Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Hirota with Dolan in order to minimize the damage caused by the exposure of one of the encryption keys. (col. 4, lines 17-19; Hirota)

As per claims 35 and 41:

The combination of Hirota and Dolan teaches all the subject matter as discussed above. In addition, Hirota further discloses wherein the device comprises a personal computer or a portable device. (figure 52)

As per claims 36, 38, 42 and 44:

The combination of Hirota and Dolan teaches all the subject matter as discussed above. In addition, Hirota further discloses wherein decrypting the data comprises: decrypting the encrypted keys; (col. 10, lines 24-25; col.59, lines 65-66, col. 60, lines 5-6) decrypting one of the plurality of additional fractional portions of the audio and/or

video files with the decrypted keys. (col. 42,lines 34-35; col. 60, line 11) In addition, Dolan in analogous art, however, discloses the title and disc key may be deleted whenever copying is performed. (Abstract; col. 4, lines 50-58)

As per claim 37 and 51:

The combination of Hirota and Dolan teaches all the subject matter as discussed above. In addition, Hirota further discloses wherein the module is further configured to store the encrypted key in a memory of the device; and for each of the additional fractional portions of the audio/video file, decrypt the encrypted key stored in the memory of the device. (col. 10, lines 24-25; col.59, lines 65-66, col. 60, lines 5-6)

As per claim 43 and 46:

The combination of Hirota and Dolan teaches all the subject matter as discussed above. In addition, Hirota further discloses calculating the media unique key; and decrypting the encrypted title key with the media unique key. (col. 10, lines 24-25; col.59, lines 65-66, col. 60, lines 5-6)

As per claim 45:

The combination of Hirota and Dolan teaches all the subject matter as discussed above. In addition, Hirota further discloses retrieving a portion of the audio and/or video file comprising less than about 10 seconds of playback. (col. 10, lines 24-25; col. 14, lines 4-67; col. 44, lines 10-49; col.59, lines 65-66, col. 60, lines 5-6)

As per claim 47-49:

The combination of Hirota and Dolan teaches all the subject matter as discussed above. In addition, Hirota further discloses a method wherein the playlist information

comprises: the name of a playlist; (Col. 17, line 39-col. 18, line 67) the playlist name string length; (Col. 17, line 39-col. 18, line 67) the playback time of the playlist; (Col. 17, line 39-col. 18, line 67) the tracks comprised by the playlist; (Col. 17, line 39-col. 18, line 67) and the index corresponding to the playlist. (Col. 17, line 39-col. 18, line 67)

As per claim 50:

The combination of Hirota and Dolan teaches all the subject matter as discussed above. In addition, Hirota further discloses a method wherein the track information comprises: a track number; (Col. 17, line 39-col. 18, line 67) an index corresponding to the track number; (Col. 17, line 39-col. 18, line 67) a number of track units in the track; (Col. 17, line 39-col. 18, line 67) and the playback time of the track. (Col. 17, line 39-col. 18, line 67)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEWAYE GELAGAY whose telephone number is (571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G./
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437